

## WHAT IS CLAIMED IS:

1       (1.) For use in a code division multiple access (CDMA)  
2       <sup>1/8</sup>wireless network, a system for synchronizing a plurality of base  
3       stations, comprising:

4               a gigabit ethernet network for interconnecting said  
5       plurality of base stations;

6               a global positioning system (GPS) receiver and a holdover  
7       stable oscillator in one of said plurality of base stations for  
8       receiving a regulated clock signal; and

9               <sup>4/10</sup>a clock recovery circuit, in (at least one other of said  
10      plurality of base stations), wherein said circuit utilizes said  
11      regulated clock signal retrieved from a data stream, from said  
12      gigabit Ethernet network, for generating a synchronizing master  
13      clock signal for said (at least one other of said plurality of base  
14      stations).

1       2. /<sub>5</sub> The system for synchronizing a plurality of base stations  
2      as set forth in Claim 1, further comprising a controller for  
3      sending said GPS regulated clock signal to said at least one other  
4      of said plurality of base stations.

1           3. The system for synchronizing a plurality of base stations  
2 as set forth in Claim 1, further comprising:

3           a gigabit transceiver circuit, in said at least one other  
4 of said plurality of base stations, for processing gigabit Ethernet  
5 transmissions.

1           4. The system for synchronizing a plurality of base stations  
2 as set forth in Claim 3, further comprising:

3           a connector for coupling said clock recovery circuit to  
4 said gigabit transceiver.

1           5. The system for synchronizing a plurality of base stations  
2 as set forth in Claim 4, further comprising:

3           a receiver portion of said gigabit transceiver circuit  
4 being coupled with said clock recovery circuit for retrieving a  
5 transmitted GPS clock signal.

1           6.<sup>14</sup> The system for synchronizing a plurality of base stations  
2 as set forth in Claim 5, further comprising:

3           a voltage compensated crystal oscillator for generating  
4 said synchronizing signal for said one other of said plurality of  
5 base stations.

1           7.<sup>13</sup> The system for synchronizing a plurality of base stations  
2 as set forth in claim 5, further comprising:

3           a synchronizing signal being generated and sent to said  
4 receiver portion, and a transmitter portion, of said gigabit  
5 ethernet transceiver circuit  
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1        ~~8~~ For use in a distributed radio system, a Code Division  
2 Multiple Access wireless system utilizing Gigabit Ethernet  
3 protocols, comprising:

4            a local area network;  
5            a plurality of base stations; and  
6            a system for synchronizing said plurality of base  
7 stations, comprising:

8            a gigabit ethernet network for interconnecting said  
9 plurality of base stations;

10           a global positioning system (GPS) receiver and a  
11 holdover stable oscillator in one of said plurality of base  
12 stations for receiving a regulated clock signal; and

13           a clock recovery circuit, in at least one other of  
14 said plurality of base stations, wherein said circuit utilizes  
15 a clock signal retrieved from a data stream, being received  
16 from said gigabit Ethernet network, for generating a  
17 synchronizing master clock signal for said at least one other  
18 of said plurality of base stations.

1           9.    The distributed radio system as set forth in Claim 8,  
2    further comprising a controller for sending said GPS regulated  
3    clock signal to said at least one other of said plurality of base  
4    stations.

1           10. The distributed radio system as set forth in Claim 8,  
2    further comprising:

3                a gigabit transceiver circuit, in said at least one other  
4    of said plurality of base stations, for processing gigabit Ethernet  
5    transmissions.

1           11. The distributed radio system as set forth in Claim 10,  
2    further comprising:

3                a connection for coupling said clock recovery circuit to  
4    said gigabit transceiver.

1           12./ The system for synchronizing a plurality of base stations  
2 as set forth in Claim 9, further comprising:

3           a receiver portion of said gigabit transceiver circuit  
4 being coupled with said clock recovery circuit for retrieving a  
5 transmitted GPS clock signal.

1           13. The system for synchronizing a plurality of base stations  
2 as set forth in Claim 12, further comprising:

3           a synchronizing signal being generated and sent to said  
4 receiver portion, and a transmitter portion, of said gigabit  
5 ethernet transceiver circuit

1           14. The system for synchronizing a plurality of base stations  
2 as set forth in Claim 12, further comprising:

3           a voltage compensated crystal oscillator for generating  
4 said synchronizing signal for said one other of said plurality of  
5 base stations.

1        15. For use in a gigabit ethernet communication system, a  
2 method for synchronizing a plurality of base stations, comprising  
3 the steps of:

4            receiving a regulated clock signal into a GPS receiver  
5 installed in one of said plurality of base stations;

6            responsive to a determination that said GPS receiver is  
7 offline, utilizing a holdover stable oscillator to generate said  
8 clock signal;

9            utilizing gigabit Ethernet media to transmit said  
10 clock signal from said GPS receiver to at least one other base  
11 station; and

12           generating a synchronizing, master clock signal from a  
13 received said clock signal for synchronizing said at least one  
14 other of said plurality of base stations.

1        16. The method for synchronizing a base station as set forth  
2 in Claim 15, further comprising the steps of:

3            determining whether said GPS receiver is online; and

4            utilizing a clock recovery circuit to generate a  
5 synchronizing, master clock signal for said at least one other of  
6 said plurality of said base stations.

1           17. The method for synchronizing a base station, as set forth  
2 in claim 14, further comprising the step of:

3           processing gigabit Ethernet transmissions with a gigabit  
4 transceiver circuit in said at least one other of said plurality of  
5 base stations.

1           18. The system for synchronizing a plurality of base stations  
2 as set forth in Claim 17, further comprising:

3           coupling said clock recovery circuit with a receiver  
4 portion of said gigabit transceiver circuit for retrieving a GPS  
5 regulated clock signal; and

6           utilizing said retrieved GPS regulated clock signal  
7 for generating:

8           a master clock signal for said one other of said  
9 plurality of said base stations; and

10          a reference signal for said receiver portion, and a  
11 transmitter portion, of said gigabit Ethernet transceiver  
12 circuit.